

Productivity and Profitability of Soybean in Cateel, Davao Oriental, Southern Philippines

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Abstract

Soybean is one of the Philippines' high-valued crops and can be processed into many products for consumption and industrial uses. However, the country is heavily dependent on imports as local farmers only produce less than 1% of the total soybean supply since 2015. This study aims to investigate the productivity and profitability of soybeans in the Davao Region, specifically in Cateel, Davao Oriental, during the 2017–2018 cropping season. The methods used in this study were Cobb-Douglas production function and cost and return and partial budget analyses. Production function estimation showed that the amount of input seeds (kg), pesticide (L), college education, and training were significant factors that contribute to productivity. Cost and return analysis indicated that for every peso outlay, soybean farmers in Cateel can gain an average of PhP 0.37. Furthermore, partial budget analysis showed that drying increases gross income for farmers who sell fresh beans and seed saving reduces cost for farmer who practice seed storage. Farmers experience inefficient infrastructure and technological support, weak enabling environment, unstable and expensive seed supply, and unstable market conditions. Only drying was found to be the value-adding process contributed by farmers. In order to alleviate the seed supply problem, a seed storage intervention is being developed, which includes off-farm and on-farm experiments to promote seed saving among farmers. Other recommendations include improved postharvest operations and infrastructure support that should reduce cost of production and strengthen the supply of soybeans in the value chain.